719

2. Small Arms and Mortars

The principal small arms factory is the Cugir branch of the Copşa Mica şi Cugir Company, which was developed by Zbrojovka of Brno and came into full-scale production in 1938. Apart from the small arms section, which specialises in the ZB 30 type of machine gun, there is also a small arms ammunition plant, and a branch at Copşa Mica which was designed for the production of various types and calibres of artillery and shells.

The production of trench mortars is almost entirely confined to the Voina works at Braşov, which specialises in the Brandt 60 mm. and 81 mm. types. Vulcan of Bucarest also is believed to be engaged on similar work, but on a smaller scale. The Braşov works produce mortar bombs also, but the filling is carried out at Satu-Lung.

3. Artillery Production

Artillery or artillery-component production is believed to be carried out by some five or six firms. The Astra-Vagoane works at Braşov was taken over by the Reşiţa Iron and Steel concern in 1936 for the assembly and finishing of various types, including the 37 mm. A.Tk. gun and the 75 mm. A.A. gun, the barrels being received in the rough state from Reşiţa. There are also facilities for the manufacture, assembly and (it is believed) filling, of various types and calibres of shells. Certain tank components may also be made.

The parent company at Reşiţa, in which Skoda is believed to have an interest, manufactures guns and carriages up to 150 mm. calibre and shell cases. There is an important branch at Orăştie for filling and assembling shells. The Concordia works at Ploeşti was converted by Schneider in 1939 for the production of 37 and 47 mm. A.Tk. guns in addition to various calibres of shells and cartridge cases. The Malaxa factory in Bucarest is also engaged on gun production, but is probably of more importance as a shell producer, particularly as it also possesses an important shell filling and assembly plant at Tohanul Vechiu. The branch at Brăila is believed to have been turned over to gun and shell manufacture in recent years. According to reports, both this works and that in Bucarest produce tanks or tank components.

Apart from the shell and filling plants already mentioned, both the State Pyrotechnical Institute and the State Military Arsenal in Bucarest are important shell and small arms ammunition producers. A new works at Avrig, which was still under construction in July 1941 was to be one of the leading shell-filling and assembly plants in Rumania, accounting for some 40 per cent. of the total output. There are a number of metal- works, such as Metrom and Farola of Braşov, Laromet of Bucarest and Costinescu of Sinaia, which add a valuable contribution by supplying components to the main shell producers.

Despite its many shortcomings, the Rumanian armament industry has in recent years become one of the most important in S.E. Europe.

399

4. Aircraft Industry

Rumania before the war possessed a small but active aircraft industry capable of producing about 500 aircraft yearly, which was, however, to a great extent, dependent upon foreign suppliers of aero-engines and aircraft components. There were three airframe factories, one of which also produced engines, output of the latter being sufficient to equip about two-thirds of the aircraft built in the country.

[27a]

[399] In the middle of 1942, under German influence, the Rumanian Government proceeded to rationalise the industry, and a Board was set up to control the country's most important armaments and aircraft factories. Under this scheme German managers or supervisors went into the aircraft factories and their main activity has since been the repair of damaged aircraft, though some new production continues. For instance, in August 1942 it was reported that an order for 200 I.A.R. fighter aircraft with 1,200 h.p. engines had been placed on behalf of the Rumanian Air Force.

[439] Rumania is still buying Italian (Savoia Marchetti) aircraft, German gliders, and various components from Germany and Switzerland.

Apart from the aircraft factories listed below, facilities for complete overhauls of airframes and engines exist at the Aviation Arsenal in Bucarest, and it has been reported that a former jute factory in Bucarest is now utilised for repair work, and that the Asam-Pipera works, also in Bucarest, are repairing engines.

Information regarding the number of workers engaged in the aircraft industry is too fragmentary to enable any estimate of their total number to be made.

[655] The main producing companies are as follows :—

(*a*) *I.A.R.* (*Industria Aeronautică Română*), the principal Rumanian aircraft company, is State-owned. It has a factory at Braşov (87 miles N.N.E. of Bucarest) for the manufacture of aircraft and aero-engines, and also produces high-precision tools of a very good quality. The factory occupies a site of some 125 acres, adjoining an airfield about 3 or 4 miles north-east of the central station of Braşov. It is a well-equipped plant and possessed considerable stocks of tools and raw materials at the beginning of the war.

The aircraft, produced before the war at a rate of about 8 monthly, consisted mainly of Potez 25 and I.A.R. 15 and 16 single-seater fighters and an I.A.R. type of four-seater commercial aircraft. The engine department produced under licence, at the rate of 25 monthly, an adaptation of the Gnôme-et-Rhône 14N. A licence was also held for Jumo 211 engines, but none of these appear to have been built.

[439] Since the war this factory has been under German control, exercised through a branch of the Hermann Göring Works. The main types of aircraft produced are I.A.R. 80 and 101 single-engined fighters and the Potez 63. Engine production appears to range between 20 and 30 a month, though the German management is trying to double that figure. Airframe output recently appears to have been about 20 monthly. In addition, a good deal of repair work is done for Germany.

The company depends largely upon imported components. It has a propeller department which, about the end of 1941, was transferred to a former paper factory in Azuga; its output, however, does not appear to have been equal to requirements, for in July, 1942, propellers were being imported from Germany.

(*b*) *S.E.T.* (*Societatea pentru Exploatări Tehnice Industria Națională Aeronautica S.A.R.*,) known up till September 1938 as I.N.A., i.e., *Industria Națională Aeronautică S.A.R.* This company was founded in 1937, sponsored by

[27 b]

CHAPTER V

399 the Ministry of Air and Marine, but reverted in 1938 to the status of a private company. The original intention was to build airframes and engines, but in practice only four types of airframes were built, equipped with imported engines of British or French design. Output was about eight aircraft monthly. The factory is situated in Bucarest, in a two-storied building on a site of about 100 yards square, and is so hemmed in that no expansion is possible. Early in 1939 there was a proposal to build a branch factory at Târgul Ocna in Moldavia for the manufacture of aircraft parts and the construction of engines and motor-cycles, but this does not appear to have been carried into effect.

The company was reported in 1942 to be under German management. Very little information is available about its present activities, but it is believed to employ about 1,000 workers and to be engaged in repair work, as well as the manufacture of sledges and skis for the Rumanian Army.

(c) *I.C.A.R.* (*Intreprinderile pentru Construcții Aeronautice Române S.A.*). This concern was established in 1931. Its factory in Bucarest produced only ten or twelve Messerschmitt aircraft in a period of three years. Early in 1942 successive increases of capital, from 14.2 to 45 million lei, appeared to foreshadow a possible development of the company's operations, but as yet there is no sign of any such development.

Present activities are believed to consist of aircraft repair, the construction of a few aircraft for the Rumanian Air Force, and the manufacture of tubes for a Berlin firm.

C. SHIPBUILDING

396 In spite of her Black Sea Coast, the navigable rivers Danube, Dniester and Prut and other streams navigable to some extent to small craft, Rumania has never been a shipbuilding country of any importance.

From a shipbuilding and repairing point of view Galați has always been and still is the most